Meeting Minutes July 25-26, 2011 Evans, GA: Full Board Meeting

Monday, July 25-Attendance:

CAB

Thomas Barnes Dr. Emile Bernard Dr. Donald Bridges Ed Burke Louie Chavis-Absent Mary Davis Kathe Golden Judy Greene-McLeod Dr. Rose Haves-Absent Stan Howard Dr. K. Jayaraman Travis Johnson-Absent Cleveland Latimore-Absent Denise Long-Absent Clinton Nangle Dr. Marolyn Parson Harold Simon John Snedeker George Snyder Skyee Vereen-Absent Dr. Gerald Wadley Sarah Watson

Alex Williams

Agency Liaisons/Regulators

David Williams, EPA Jonathan Walsh, EPA Van Keisler, SCDHEC Heather Cathcart, SCDHEC Shelly Wilson, SCDHEC Kim Newell, SCDHEC

Contractors

Paul Sauerborn, SRNS Caroline Bradford, SRNS Ginger Dickert, SRR Dan Burnfield, DNFSB Erica Williams, V3 James Tanner, V3 Ashley Whitaker, V3

DOE/Other

Doug Hintze, DOE-SR

Becky Craft, DOE-SR
Patrick McGuire, DOE-SR
Wade Whitaker, DOE-SR
Rich Olsen, DOE-SR
Mike Simmons, DOE-SR
Jim Folk, DOE-SR
Kirsten Boessneck, DOE-SR
Dennis Ryan, DOE-SR
Candice Freeman, DOE-SR
Gerri Flemming, DOE-SR
Keith Lawrence, USDA-FS
Tiajuana Cochnauer, USDA-FS

Stakeholders

Tom Clements
Frances Close
Liz Goodson
Nancy Bobbitt
Patricia Carpenter McCracken
Jim Hussey
John Gadd
Sam Booher

Erica Williams, V3 Technical Coordinator for the CAB, served as CAB Facilitator in Jenny Freeman's absence for this meeting. Ms. Williams reminded everyone to speak into their microphones when making comments, and to state their names and affiliations. She asked everyone to sign-in and to leave their name tags on the table at the end of the day. She then reviewed the day's agenda. She introduced CAB Chair Donald Bridges for an Environmental Management Site Specific Advisory Board (EMSSAB) Recommendation Discussion.

EMSSAB Recommendation Discussion-Donald N. Bridges, CAB Chair

CAB Chair Bridges explained what the SSABs are, and said these Boards will occasionally make a recommendation when it has complex, wide-spread implications. When this happens, he explained the recommendation is brought to the SSAB Chairs meeting, and it has several Boards representing it rather than just one.

He continued that when these recommendations are shared with the entire SSAB membership by the respective Chairs, they cannot be modified. He said the recommendations before the CAB members will be what they vote on; he said they had three recommendations that day to review and vote on. He reviewed all three recommendations with the CAB. The three recommendations were titled, "Asset Retention," "Authorizing Funds for Movement of Historical/Cultural Artifacts," and "Using Rail Transport for Moving Waste."

The first recommendation the Board reviewed was "Asset Retention." CAB member Bridges asked if anyone had any comments on the recommendation. CAB member K. Jayaraman asked when it is listed that the EMSSAB CAB Chairs bring forth a recommendation, does it mean the Chairs of those CABs have joined together to form these recommendations. CAB chair Bridges said that is true. CAB member Jayaraman said he would like his CAB Chair to make a recommendation based on what his Board has told him. CAB Chair Bridges said the recommendations generate at the Site level and then once it works through that process, the other sites are brought in.

CAB member Judy Greene-McLeod asked for specific examples of "assets" in the recommendation. CAB Chair Bridges said H Canyon was "almost" one of the asset examples, but not quite. He said one asset that comes to mind is Heavy Water. He asked Pat McGuire, DOE-SR, if he could list any other examples at SRS that would serve as an example of "Asset Retention." Mr. McGuire stated Helen Belencan, DOE-SR, would provide a presentation on Asset Retention the next day; he said it would be a good idea if the CAB delay voting on the EMSSAB Recommendations until after her presentation. Mr. McGuire said Asset Retention goes to the extent of excess pumps, valves, motors, gloveboxes, and other things of those natures. He said they are looking into reusing them rather than disposing them, if possible.

CAB Chair Bridges then brought up the recommendation titled "Using Rail Transport for Moving Waste" for discussion. He said this recommendation was from the Northern New Mexico Advisory Board. He then reviewed what the recommendation entailed. CAB member John Snedeker said there was a shipment received in the Port of Savannah the previous week from France. He said its destination was Los Alamos and it was going by truck.

CAB member Bridges then moved onto the next recommendation, "Authorizing Funds for Movement of Historical/Cultural Artifacts." He reviewed the recommendation. CAB member Jayaraman said he doesn't know why anyone would pay the cost of disposition in order to ship materials to someone else that could use them. He said it may sound logical, but it is not correct. He gave an example of a shop owner giving free almost-spoiled bananas to customers before the bananas could spoil; he said it sounds logical, but no one would do it.

CAB Chair Bridges said the CAB would vote on the recommendations the next day, after Helen Belencan's presentation.

COMMITTEE UPDATE-Nuclear Materials

CAB member, and Nuclear Materials (NM) co-Chair, John Snedeker began his committee update by listing all members of his committee. He said the committee has three open recommendations. He said Recommendation 263 has been proposed to be withdrawn by CAB Chair Bridges. CAB member Snedeker reviewed the recommendation, which is shared with the Waste Management Committee. He also read over the DOE Response to Recommendation 263. CAB Chair Bridges said he doesn't think withdrawing the recommendation would be a good idea. CAB member Greene-McLeod said she was involved with the Nuclear Materials Committee when Recommendation 263 was written, and said she remembered that the CAB was going to wait until the Blue Ribbon Commission came back with a final report before making a decision on Recommendation 263. She said there has been discussion, however, that there may have been recommendations written after Recommendation 263 that may have taken the place of 263. CAB member Snedeker said this is correct.

CAB member Snedeker moved on to review Recommendation 266. He read over the recommendation and reviewed the DOE Response, saying it was out of date. CAB Chair Bridges said until DOE deals with how it is going to process the material or not process the material, they aren't going to be able to fully answer the recommendation.

CAB member Snedeker then reviewed Recommendation 271, reading over it and its DOE Response. Mr. McGuire said the DOE Response is still up to date and they're waiting on other decisions to be made.

CAB member Snedeker stated there are two pending Nuclear Material recommendations: 275 and 276. He reviewed Recommendation 275 and deferred discussions on 276 until after Mr. McGuire's presentation. CAB member Snedeker announced the next Nuclear Materials Committee meeting.

PRESENTATION

Update on H Canyon and HB-Line-Pat McGuire, DOE-SR

Mr. McGuire, DOE-SR and co-Designated Deputy Federal Official (DDFO), said he was going to provide an update on H Canyon and HB-Line. He said DOE will continue its traditional operations in FY11 and into FY12. He overviewed these operations. He continued by stating at the end of this calendar year, H Canyon will be transitioning from its current operations to modified operations and new missions. He overviewed these modified operations and new missions.

CAB Chair Bridges asked how the draft recommendations from the BRC would change or direct activities. Mr. McGuire said his understanding of the draft recommendations is that the BRC could not reach an agreement. He said they recognized the country needs to continue to evaluate Used Nuclear Fuel (UNF), primarily focused on commercial fuel. He said the BRC did mention H Canyon as a potential site where some research and development could be performed, but the draft recommendations don't mention anything with regard to the foreign and domestic research reactor fuel that SRS has on-site. Mr. McGuire said it is a little early to say if DOE would perform any actions one way or the other, since the BRC has not committed. He said he doesn't want to speculate, but did state the draft report sections are "very vague and noncommittal."

Mr. McGuire said H Canyon would partner with the Office of Nuclear Energy and National Nuclear Security Administration (NNSA) on new missions. CAB member Jerry Wadley asked if this partnership was a "done deal." Mr. McGuire said it is not. He said DOE is just beginning to engage those program officers. He said new missions takes money and money is tight nowadays. CAB member Wadley asked if the partnership does occur, will the CAB be able to make recommendations on the activities of the partnership. Mr. McGuire said yes, and said they would welcome CAB input.

CAB member Marolyn Parson asked Mr. McGuire to explain what the National Environmental Policy Act (NEPA) is and what it is about H Canyon operations that triggered NEPA's involvement. Mr. McGuire said that anytime the government partakes upon a significant change, the potential environmental impacts need to be evaluated in order to look at a variety of alternatives, and to make a Record of Decision (ROD) on a preferred alternative. He continued that the NEPA process for UNF was done around 10 to 15 years ago. He defined the preferred alternative at that time. He said they've made an amended ROD after looking at other alternatives. He defined what this new ROD up at headquarters recommends.

CAB Chair Bridges asked when a decision would be made. Mr. McGuire said that until DOE has made a decision, they are not going to make a decision in regard to that ROD until after the BRC issues its report and its recommendations are evaluated by DOE. He said the ROD has been up at DOE Headquarters (HQ) since April of last year.

Mr. McGuire then reviewed the current and future status of HB-Line. He said it is a "glovebox," hands-on facility. He said HB-line was taking the surplus plutonium, dissolving it, and sending the plutonium directly to a sludge batch used in High Level Waste. He said that plutonium would be mixed with other High Level Wastes and vitrified into glass logs. He continued that they've since stopped doing that. He said due to input from the CAB, DOE wanted to make sure the Plutonium was safely dispositioned and put in glass canisters. He added the goal was to get it into the final disposal location. He said at the time they were hoping Yucca Mountain would be available, but that is not happening right now. He stated that Dr. Dave Moody, SRS Site Manager, said the Plutonium could be safely dispositioned at the Waste Isolation Pilot Plant (WIPP)," so in addition to removing it from the site, it would be sent to the final repository at WIPP.

Mr. McGuire said they began a process to stop dissolving plutonium and put in a capability to repackage the Plutonium and send it to WIPP. He said they began modifying the facility to put in new capabilities; he

explained this process. He said they plan to prepare two shipments to WIPP this fiscal year. He continued by stating the Interim Action for NEPA has been approved to allow disposition of up to 85 kgs of the non-pit/non-surplus Plutonium. He said this will take until around June of 2012 if they start in October 2011, which is the plan.

As part of the current and future status of HB-Line, Mr. McGuire said they are planning to expand the Plutonium shipment to WIPP to three processing/glovebox lines. He said they will continue the demonstration of Vacuum Salt Distillation on non-moxable Plutonium to transform it as a potential feed to MOX. He said there are 20,000 to 30,000 pipe overpack containers that will need to be used and then shipped to WIPP. He explained what having a three WIPP line capability installed in HB-Line would entail. He said if they get this capability installed, they are estimating around five years needed to disposition all the surplus non-pit Plutonium from SRS. He added they are working with NNSA. He then reviewed a chart that showed H-Area capabilities. This chart included the following three core missions: Environmental Stewardship, National Security, and Clean Energy. He listed and explained priorities within each area.

He summarized his presentation by stating H Canyon will continue its traditional operations in FY11 and into FY12. He said with new partnerships, H Canyon will transition from traditional operations to new missions operations in FY12. He said HB-Line is preparing to begin dispositioning non-MOXable Plutonium to WIPP, and they will ensure all nuclear materials are safely and securely stored during this transition period.

CAB member Kathe Golden asked how long, from start to finish, the flushing process would take. Mr. McGuire said it will take several months. CAB member Golden asked if after the flushing takes place, if there aren't any more missions that have been completed, does that mean the facility will be put in "neutral," or "cold storage." Mr. McGuire said yes, once the facility is flushed a lot of the hazards are removed, and therefore they will not need the same number of operators. He said they are going through additional workforce restructuring at SRS. He said once they complete the current number of missions, if they don't receive additional funds and if no decisions are made, the facility will be put in a neutral position, but will remain in a high state of readiness. CAB member Golden asked if the flushing is the first step to a total shut-down. Mr. McGuire said if they were to shut-down, the flushing would be a first step.

CAB member Ed Burke asked what percentage of personnel cost will they lose by going to the ready-safe mode. Mr. McGuire said there were around 720 direct full time equivalent workers directly charged to HB-Line and H Canyon. He said to get to the state where the president's FY12 budget is, the number of staff will go down to around 400. He said in FY12 they are preparing to work on a \$150 million budget, which is lower than the year before.

CAB member Marolyn Parson asked if there is a worldwide decline in the request for nuclear fuels because of the disaster in Japan. Mr. McGuire said several countries are backing away from nuclear fuel and the disaster in Japan has brought into focus some of the dangers of nuclear power. He said he believes nuclear power will play some role in the United States and other countries' portfolios, but he is not sure how much of a role it will play.

CAB member Emile Bernard asked what kind of waste streams can be expected when they perform the flushing operations. Mr. McGuire said when they flush they use processed water, which is water and nitric acid solution. He said they flush the dissolvers, pumps, tanks, and other things of that nature. He continued that they would evaporate as much as possible and the solutions would go to Liquid Waste. He said they would remove the bulk fissile materials in order to remove the potential for a nuclear criticality. He said they won't go to the extent that was reached at F Canyon.

COMMITTEE UPDATE, CONTINUED: Nuclear Materials

CAB member John Snedeker, NM co-Chair, discussed Recommendation 276, saying it had many parts to review. He went over the DOE Response; he said it expressed agreement on the part of DOE with the recommendation. CAB member Snedeker said he felt it would be best for the CAB to read the response to themselves and then discuss it; he asked CAB Chair Bridges if he agreed with this direction. CAB Chair Bridges said he would rather the Board read it over and discuss it at a later time because he had not had time to read over it and reflect on it. CAB member Snedeker agreed with this approach.

COMMITTEE UPDATE: Strategic & Legacy Management

CAB member, and Strategic & Legacy Management (S&LM) Chair, Jerry Wadley began his update announcing his committee's next meeting. He said he wants to put in some useful recommendations before the end of the year. He said SL&M currently has three open recommendations: 262, which he said is on Future Missions and is ongoing, 272, which is on the SRS Public Tours Program, and 277, which is on the Integrated Priority List and Budget Input. He said he received a response from DOE on Recommendation 277, and said he would discuss this at his committee meeting next month. He said there is a scheduled tour of H Canyon for October 11. He said this is on the day of his meeting. He then introduced Paul Sauerborn for a presentation on the Cold War Historic Preservation Program.

PRESENTATION

Cold War Historic Preservation Program-Paul Sauerborn, Savannah River Nuclear Solutions

Mr. Sauerborn reviewed his presentation's agenda, and then began discussing the National Historic Preservation Act (NHPA) of 1966. He said the NHPA requires that all Federal agencies consider the impacts to historic properties in all their undertakings. He said they have been involved in many D&D activities over the past several years, and during the height of those actions, the NHPA was active. He then reviewed the three steps for compliance with NHPA.

He said at SRS they created a site-level plan called the Cultural Resources Management Plan (CRMP). He said this is the implementation plan at the site used in order to make sure the program follows NHPA requirements. He said it contains mitigation strategies, describes the roles of oral histories, describes how DOE will nominate eligible properties to the NHPA, indentifies key historical documents to be preserved, contains a process to determine how and where documentation will be archived, and contains a series of short-term and long-term goals for the Historic Program Management. He then reviewed program accomplishments, focusing on "Thematic Studies." He said they have several Thematic Studies and are very detailed. He explained that Thematic Studies tell the history of different areas and projects that happened at SRS.

CAB Chair Bridges asked if the term "Thematic" is a term derived on site or if it is a historical description. Mr. Sauerborn said it is a historian's term. He said when they talk about thematic studies, the studies contain oral histories, photographic documentation of areas, as well as documentation of processes and how they worked, and tell a story to the reader about what the workers did onsite on a daily basis. He then reviewed the Thematic Studies and what they cover. He also provided an overview of other accomplishments such as the 777-10A HAER Study and Tritium Study Files.

Mr. Sauerborn reviewed support to the SRS Heritage Foundation. He said the SRS Heritage Foundation, with the exception of its name, has nothing to do with SRS directly. He explained it is an organization that is compiled of retirees and others who are interested in the historical capture of SRS's history. He reviewed the accomplishments of the SRS Heritage Foundation, which included acquiring DOE's permission to publish "SRS at 50," a DOE Letter of Intent for Building 742-A, a DOE Letter of Intent for the Ellenton Walking Trail, and a DOE Letter of Intent for a barricade adjacent to the old city of Ellenton, SC.

He continued by listing ongoing activities, such as organizing Heritage Tourism Team Meetings, Historic Preservation Advisory Team Meetings, and the approximately 100 oral histories that have been completed to date. He said they will continue to identify and relocate artifacts, photography, and drawings. He stated they work with the SRS Tours Program, and the Site News addresses the Cold War Historic Preservation Program. He added that the anticipated completion of Revision 1 to the CRMP is shortly after C-Area Disassembly Basin Notification letter is final. Mr. Sauerborn provided an update on the SRS Curation Facility, stating work continues at 315-M. He showed some photos of 315-M, the Curation Facility, and explained what progress is being made there.

He listed curatorial activities, stating there are 1,800 records in their database. He said the database is very "involved." He explained the records include artifacts, collections of related artifacts, and documentary collections. He reviewed activities such as digitized oral histories, consolidated historic photographic negatives, and the artifact loan program that is in place for the Aiken County Historical Museum and others.

Mr. Sauerborn then reviewed future deliverables, which included a Separations Thematic Study draft in FY12, and a R&D Thematic Study draft in FY12.

He then invited Caroline Bradford, New South Associates, to present artifacts, including a collection of Operation Housing Documents and a Plat Book.

CAB member K. Jayaraman asked what was the criteria for historical preservation. Mr. Sauerborn said the real driver is the National Historic Preservation Act. He said once something hits the 50-year mark, they have to deal with it from a historical component. He said how they preserve these things is at another level. He continued that they have taken down buildings that are relative to the Thematic Studies, but they have pictures, narratives, and the study itself that serves as a form of historical preservation. He said this is easier than trying to save an area in total.

CAB Chair Bridges asked, looking ahead 10 to 20 years, what would be the general approach for the casual tourist in terms of what he or she would see on the Site. Mr. Sauerborn said many of the bigger structures would be gone or altered. CAB Chair Bridges asked if Mr. Sauerborn has a proposed pathway or approach to showing something to the casual tourist, such as a way in, and a few stops they would show them. Mr. Sauerborn said he would get back to CAB Chair Bridges with that information.

CAB member Alex Williams asked if the cemeteries on site have been preserved. Mr. Sauerborn said that is not in his work purview, but informed CAB member Williams that the archaeology department and the Forest Service handle that area.

COMMITTEE UPDATE, CONTINUED: S&LM

CAB member Wadley provided a brief update on the SRS Public Tours. He said there were 30 tours scheduled for 2011 and 18 have been held so far. He said of those 18 tours, they registered 46 to 50 interested participants, but there was a 23 percent no-show rate. He said this means that each tour had about 35 to 40 people show up. He said of the 12 tours left, there are 700 seats, and only 145 of those seats are available. He provided information on how to attend an SRS Tour. He added that Helen Belencan, DOE-SR, spoke at a Kiwanis meeting per his request in February, and since then, 30 Kiwanis members have signed up for a public tour.

COMMITTEE UPDATE: Waste Management

CAB member, and Waste Management (WM) Committee Chair, Bernard introduced his committee's members and Vice Chairs. He introduced presenter Mike Simmons, DOE-SR.

PRESENTATION

Low-level, Mixed Low-level, and Hazardous Waste Disposition-Mike Simmons, DOE-SR

Mike Simmons, DOE-SR, first stated his presentation's purpose and agenda. Mr. Simmons referred to the SRS Low-Level Radioactive Waste Disposal Area diagram, stating all of its operations today are consolidated within E-Area, between the two canyons and the tank farms. He said they are centrally located and own their own groundwater disposal divides; he said that is where all the disposal actions for low-level waste go. He explained the mixed and hazardous wastes are processed there for shipment off-site. He added it is an ideal location.

He then explained low-level waste. He said the tank waste the Liquid Waste presenters speak about at CAB meetings is high-level waste. He explained that high-level waste has been generated as part of the process of reprocessing spent fuel. He said it is not necessarily based on an activity level, but where it came from. He then stated the CAB would hear about Transuranic (TRU) waste the next day, and explained that TRU waste has a concentration base, and is the only risk-based waste stream they have in DOE. He said if the waste isn't one of those two, or by-product material, it is low-level waste. He said low-level waste can be high in radioactivity or very low in radioactivity. Mr. Simmons explained that 99 percent of low-level waste that is generated or received on site is disposed of in the E-Area Low-level Radioactive Waste Disposal Facility. He referred to a photo of the Disposal Facility, saying it has a combination of trenches and vaults. He continued that their authorization to dispose of low-level waste in that facility is through a process called a Performance Assessment (PA). He said through the PA process, they go through a review from an external team from DOE Headquarters. He said if they approve the PA, they receive a Disposal Authorization Statement from HQ; this is their permit to operate.

He then referred to a flow sheet of the low-level radioactive waste disposition process. He said the SRS-Generated low-level radioactive waste will either meet the E-Area Performance Objectives, not meet the Performance Objectives, or be deemed not cost-effective for on-site disposal. The flow sheet stated that if the low-level waste does meet the E-Area Performance Objectives it will go into vaults or trenches; otherwise, it will go into commercial disposal or offsite federal disposal.

CAB Chair Bridges asked what is being sent to Energy Solutions that cannot be sent to the trenches. Mr. Simmons said the depleted uranium oxide is a prime example. He said they have a shallow water table, so certain isotopes present problems, especially in large quantities.

Mr. Simmons reviewed the low-level radioactive waste status, saying a lot of work has been done with ARRA funding. He referred to a photo that showed covers that were recently installed over Slit Trenches 1-5. He said they entered into an agreement with SCDHEC and EPA, Region 4, that for CERCLA waste, DOE would install operational covers once the Slit Trenches were filled. He pointed out walking areas on the covers, which lead to monitoring wells.

CAB Chair Bridges asked how often the covers are replaced. Mr. Simmons said the covers are bolted down and are guaranteed for 10 years by the manufacturers. He said they have it in their baseline to replace them every 15 years.

Mr. Simmons said they completed the depleted uranium oxide (DUO) disposition the previous Friday. He said it took 391 trucks to ship it out; he said it could have been done in two rail shipments. He said all the work was done safely, with no injuries or transportation issues, and in six months time. He said there is no legacy low-level waste in storage at the moment, and the only off-site receipts are from Naval Reactor facilities.

He then referred to a flow sheet of the mixed low-level radioactive waste disposition process. He said limited facilities can accept this type of waste for treatment and disposal. He said all mixed low-level waste goes off-site, and no mixed low-level waste is disposed of on-site. He said they treat very little of it, but it goes off-site to commercial vendors, who dispose of it.

He said because they've been able to work down their waste volume, the only legacy waste in storage is 50 cubic meters that are being stored in small volumes for radioactive decay. He continued that two Resource Conservation and Recovery Acts (RCRA) permitted treatment and storage facilities, including Building 710-B Hazardous/Mixed Waste Facility and N-Area Hazardous/Mixed Waste Facilities, were recently closed to reduce operational footprint.

CAB Chair Bridges asked if SRS is generating much mixed low-level waste. Mr. Simmons said they are not generating much. He said the only real volume they're getting is coming out of the TRU Program.

Mr. Simmons said they will continue the disposition of newly generated waste within one year of generation, and there are no off-site receipts of mixed low-level waste.

He then referred to a flow sheet of the hazardous waste disposition process, saying it is much simpler. He said the SRS-generated hazardous waste is sent to off-site treatment at a commercial vendor, and is then disposed of at an off-site commercial disposal site. While providing the hazardous waste status, he said they recently dispositioned 154 railcars of lead contaminated soil removed from the Small Arms Training Area (STA), and they will continue the disposition of newly generated waste within one year of generation. He continued by stating there is no legacy waste in storage, and there is no off-site receipts of hazardous waste.

He concluded his presentation by stating that with one small exception, legacy waste has been eliminated at SRS. He said operational footprint has been reduced, and the Solid Waste Program is in a steady state where all waste types are being dispositioned in an efficient and timely manner.

CAB member Williams asked if it is highly likely that all three waste types Mr. Simmons discussed is buried in the old burial grounds. Mr. Simmons said yes, because the old burial grounds predate many current regulations.

CAB member Bernard asked if there is a limit to how much low-level waste can be disposed of at the site. Mr. Simmons said they have the capacity to keep disposing of it, but in the day-to-day operations there is a balance of radioactivity versus volume. He said in each trench or vault they know there is a certain amount of radionuclides they can put in there, and there is a balancing act that needs to be considered.

COMMITTEE UPDATE, CONTINUED: Waste Management (WM)

Proposed Recommendation Discussion: SRS Waste & By-Products Matrix

CAB member Bernard introduced a proposed recommendation, titled "SRS Waste & By-Product Matrix," saying WM Vice Chair, Ed Burke, has been working on it. He invited CAB member Burke to provide an overview of the proposed recommendation.

CAB member Burke said there has been a lot of discussion about different wastes and nuclear materials. He said the recommendation is about putting together a routine tracking tool the CAB can rely on in the future and periodically review. He said the intent is to review/update every six months. He then read through each portion of the recommendation and pointed out the excel spreadsheet copy of the matrix. He said the intended audience for the matrix would be new CAB members who do not have a Site background. He gave examples of wastes being tracked on the matrix, and spoke about research reactor waste, and how it would be cataloged on the matrix.

CAB member Burke said the WM Committee is asking for comments on the recommendation, comments on the intent of the recommendation, and if people support it. He said with this recommendation, the CAB will have a living document that tells the CAB what materials are on the site, are coming to the site, where they came from, and the plan in place for final disposition. He then opened up the floor for discussion on the proposed recommendation.

CAB member Jayaraman said he thinks the recommendation is an excellent way to gather information in a simple way, but he has some basic doubts concerning the recommendation. He said the WM Committee is asking that the matrix should include all waste and by-products, but he doesn't understand how it is going to distinguish between the waste and by-products classification. He stated he couldn't find the information on nuclear materials in the matrix, and said it should include hazardous wastes as well.

CAB member Judy Greene-McLeod said she doesn't agree with the wording in the recommendation that states, "these reports can be in the requested format, or any other format that DOE deems useful to workers and stakeholders." She said it needs to be something the CAB and DOE agree is useful to workers and stakeholders because the ongoing problem has been that DOE jargon is not easily understood by the public.

Pat McGuire, DOE-SR, said he knows they've been working on this recommendation for a while and the CAB is frustrated. He said in regard to the nuclear materials, to get to the level of detail the CAB has identified, there are 40,000 entries for nuclear materials that DOE would identify. He said he knows this is not useful, but he agrees with CAB member Greene-McLeod that getting to an agreed upon criteria will be key. CAB member Burke said he doesn't think that's what their intent was. He said he thought they had relatively broad categories. He said they would have maybe 20 broad entries that will be able to cover and capture everything. He added there is some flexibility, but the issue is completeness.

CAB Chair Bridges asked Mr. McGuire if he could "direct-assess" the CAB so it could end up with a five to 10 page report. Mr. McGuire said he believes that is what Rich Olsen, DOE-SR, would be providing the next day. He said they have what used to be referred to as the "Gold Metrics Chart," and from input given from the CAB, Mr. Olsen has expanded that chart in order to be more comprehensive. He said maybe they could use that as the starting point. Mr. McGuire said he will need some clarification on some points in the CAB's matrix. He used Foreign Domestic Research Reactor Fuel as an example, stating he was not sure since the disposition path is the same, and they're going to treat the material the same, why it's important to the CAB whether it is foreign or domestic. He said to consolidate that under Used Nuclear Fuel (UNF) would reach the same goal. CAB member Burke said that's a good example. He said he, as a member of the CAB and as a person who lives near SRS, is concerned about material being brought in from other countries. He said he sees those as conceptually different materials even though technically they may be the same.

CAB member Kathe Golden said she agrees with the recommendation, but is confused where the recommendation asks for a "Waste and Nuclear Materials Matrix" by November 15, but then requests a "Waste Inventory Report" 30 days after the recommendation. She said, to her, a "Waste Inventory Report" would be the matrix. CAB member Burke said it is somewhat different in terms of the information being gathered and the timing is different. He said in the long-term he is not sure if there is a need for the report. He said the report was something CAB member Bernard specifically wanted to include. CAB member Bernard said he thought they needed some type of statement of the inventories and for the stakeholders to be able to see if the inventory wastes were being built up on the site, or if some of it was being shipped out. He said the report is there because it is necessary to get started on the matrix. He said if you don't have the source term, the elements in the matrix may be skewed. He called the report a "starting point." CAB member Burke said it will perhaps help them screen the matrix. CAB member Golden suggested putting the terminology "as a starting point" in the recommendation for clarification.

CAB member Jayaraman said he thinks the matrix demands details of the waste by-products and nuclear materials. He said the details seem to be overwhelming in terms of what is expected and what can be provided. He said maybe there should be more discussions with DOE concerning the matrix. CAB member Burke said there have been at least two presentations on the matrix and Mr. McGuire, and Jay Ray, DOE-SR, have worked very hard on it. He said they decided to make it a full recommendation because they wanted it to be an ongoing tool.

Shelly Wilson, SCDHEC, said there are some regulatory distinctions in the definition for waste and by-products so they are not completely interchangeable. She said the way the CAB wrote the recommendation, it is noting that wastes and by-products were generated, which is true, and the CAB is asking for a waste

and a materials matrix, so they're covering its bases. She said she thinks the recommendation is fine, but wanted to note that wastes and by-products are not interchangeable.

COMMITTEE UPDATE: Administrative Committee

CAB member, and Administrative Committee Chair, Kathe Golden, announced the CAB membership campaign is currently underway. She asked everyone to tell others that the CAB is looking for new members. She continued that everyone would receive a membership packet the next day to share with others. She listed which current members were eligible to reapply. She said the spring issue of the Board Beat is available for pick-up, and she reminded everyone that the SRS CAB is the only Board who is currently conducting online meetings. She asked members to sign-on to online meetings when they're not able to attend in person. She then announced the CAB has a shorter web address: http://cab.srs.gov.

PUBLIC COMMENTS

There were no public comments at this time.

COMMITTEE UPDATE: Facilities Disposition & Site Remediation (FD&SR)

CAB member and FD&SR Chair, Marolyn Parson, gave the purpose of her committee and listed the FD&SR committee members. She overviewed her last committee meeting and said she was disappointed in the committee attendance. She listed which members attended the meeting, and reviewed what presentations were given.

She said one thing she did report on at her last committee meeting was a final action for in situ decommissioning of the 105C Disassembly Basin. She said she was very interested in not only what the final decision would be, but the public comment process. She said she has been looking into it and is concerned about the public input process relative to many of these decisions. She said a 30-day comment period makes it very difficult for the CAB to make a comment as a Board and is very limiting to the public. She said hardly no stakeholders routinely comment. She said she is also concerned about the readability of those documents and would continue to look into the process.

She said the FD&SR committee currently has no open recommendations, and announced when the next FD&SR committee meeting would be held.

PRESENTATION

Savannah River Environmental Field Station Poster Session-DOE-SR, & SC State University

Candice Freeman, DOE-SR, spoke briefly about the poster sessions that would be held at the close of the CAB meeting that day.

Ms. Freeman said one of DOE's grantees is the Savannah River Environmental Sciences Field Station, which is held every summer at SRS. She gave a brief background of the program. She said as the only undergraduate Environmental Sciences Field Station in the country, the Savannah River station has had a record of producing outstanding minority environmental scientists and training in environmental sciences and natural resources. She said she attended this station in the summer of 2003, which encouraged her to leave the chemical engineering industry in order to focus more on environmental science.

She provided an overview of what the student posters entailed and encouraged everyone to attend the session.

PUBLIC COMMENTS

Patricia Carpenter McCracken, Augusta, commented on the Historic Preservation presentation that was given earlier in the day. She said there was a calendar done about New Ellenton with historic photos. She said she believed it was free at the CAB meeting. She said she didn't know where these were being archived. She said Caroline Bradford, New South, comes to the meetings with very fragile artifacts, wearing gloves. She asked if it was protocol to make copies of those types of things. She said there is a model of history in Las Vegas and the partners are EPA, as well as others. She said she doesn't know who New South is but she doesn't think they should haul around their very delicate documents to meetings. She said they were shown some pictures of housing, which she doesn't know is the most interesting thing about the history of the site, and the presentation was very "terse." She said the History Channel had a program about the core engineers and when they began the site with DuPont. She said no testing was done at SRS before it was selected by Congress, which sounds like Yucca Mountain. She said she didn't think housing was the most interesting thing to show. She spoke about some other history programs that she's seen.

~Meeting adjourned

Meeting Minutes July 25-26, 2011 Evans, GA: Full Board Meeting

Tuesday, July 26 Attendance:

CAB

Thomas Barnes Dr. Emile Bernard Dr. Donald Bridges Ed Burke Louie Chavis-Absent Mary Davis Kathe Golden Judy Greene-McLeod Dr. Rose Hayes-Absent Stan Howard Dr. K. Jayaraman Travis Johnson-Absent Cleveland Latimore-Absent Denise Long-Absent Clinton Nangle Dr. Marolyn Parson Harold Simon John Snedeker George Snyder Skyee Vereen-Absent Dr. Gerald Wadley Sarah Watson

Alex Williams

Agency Liaisons/Regulators

David Williams, EPA
Jonathan Walsh, EPA
Ashly Claybourne, EPA
Van Keisler, SCDHEC
Heather Cathcart, SCDHEC
Shelly Wilson, SCDHEC
Kim Newell, SCDHEC
Greg Mason, SCDHEC

Contractors

Fred Dohse, SRNS
Paul Sauerborn, SRNS
Jeannette Hyatt, SRNS
Richard Reichel, SRNS
John Gilmour, SRNS
John Gilmour, SRNS
John Gilmour, SRNS
Doug Bumgardner, SRR
Kevin Jeselnik, SRR
David Little, SRR
Ginger Dickert, SRR
Frank England, SRR
Erica Williams, V3
James Tanner, V3
Ashley Whitaker, V3

DOE/Other

Zack Smith, DOE-SR
Doug Hintze, DOE-SR
Becky Craft, DOE-SR
Patrick McGuire, DOE-SR
Jim Folk, DOE-SR
Helen Belencan, DOE-SR
Kirsten Boessneck, DOE-SR
Dawn Gillas, DOE-SR
Bert Crapse, DOE-SR
Maxcine Maxted, DOE-SR
Wade Whitaker, DOE-SR
Rich Olsen, DOE-SR
Gerri Flemming, DOE-SR
Tiajuana Cochnauer, USDA-FS

Stakeholders

Tom Clements
Frances Close
Sam Booher
Rick McLeod
Nancy Bobbitt
Patricia Carpenter McCracken
Joe Ortaldo

CAB member Alex Williams led the Board in the Pledge of Allegiance. Erica Williams, V3 Technical Coordinator for the CAB, servedas facilitator for the CAB in the absence of Jenny Freeman, V3. Ms. Williams overviewed the agenda, noting any changes that may have occurred. She then introduced CAB Chair Bridges, who opened the meeting.

APPROVAL OF MINUTES

CAB Chair Bridges asked for a motion to approve the minutes from the May 2011 Full Board meeting. CAB member Williams moved to approve the minutes and CAB member Harold Simon seconded the motion. There was no discussion held and no edits were made. The minutes were approved unanimously by the CAB.

CAB CHAIR UPDATE

CAB Chair Bridges began his update by stating the CAB had two resigning members-Tabitha Barrett and Paul Boynton. He stated since the last Full Board meeting, the CAB has had four committee meetings; he reviewed these meetings. He said he and CAB member Wadley attended the EM-SSAB Chairs' Meeting in

Las Vegas in June; he provided a brief overview of the meeting. He said CAB member Wadley would cover the tour they attended while at the meeting in Las Vegas. CAB Chair Bridges said DOE is looking for a "bang for the buck" from the SSAB committees. He said they want more productive input from all Boards.

He asked CAB Vice Chair, and member, Judy Greene-McLeod if she had any comments on a meeting she attended concerning the Enterprise SRS. CAB member Greene-McLeod said she was invited to represent the CAB at the meeting. She said the meeting featured a consulting company out of Greenville, SC, that gave a presentation on the Enterprise SRS. She said it is a company that has worked a lot at various government facilities that were changing their missions. She said the presentation was very in depth and indicated the company's past track record in implementing mission changes. She continued that this company has been hired to help develop the Enterprise SRS vision or mission. She stated the audience was made up of community leaders and different groups on-site. She said later the company met with specific groups, but she wasn't included in that. She summarized by stating that the meeting provided an overview, and was very informative.

CAB Chair Bridges spoke about the Defense Nuclear Facilities Safety Board (DNFSB) public meeting that took place on June 16. He said this Board is an independent federal agency that overviews DOE from a safety standpoint. He listed the topics that were addressed at the meeting. He said two members from the CAB provided comments, or input, as private citizens-himself and Rose Hayes. He summarized the comments he provided. He then stated there was a Nuclear Regulatory Commission (NRC) public meeting on June 21-22. He attended this meeting and stated what the purpose of the meeting was.

He continued that the United Kingdom Nuclear Decommissioning Authority (NDA) visited Aiken and SRS in early June. He said the delegation included the CEO and three other members of his staff. CAB Chair Bridges said he represented the CAB when meeting with the NDA. He reviewed the purpose of the meeting, which was described as a community event in Aiken to allow public participation and an opportunity to see how the community feels about Liquid Waste Processing at SRS.

CAB Chair Bridges provided an overview of the Blue Ribbon Committee (BRC), explaining when and why it was formed, as well as its Charter. He said the Draft Reports have now been issued and he then reviewed a few of the recommendations made by the BRC. He also spoke about the 2012 Waste Management Conference. He said the conference is scheduled from February 26-March 1, 2012, and abstracts are due in August.

He continued by stating he represented the CAB at an Environmental Justice meeting on July 12. He said the meeting was interesting. He said there was approximately 50 to 60 people in attendance, and listed the topics discussed, which included the EPA Superfund Job Training Program, radium present in drinking water, and the chlorine release disaster, and subsequent testing, in Graniteville. He said the Environmental Justice group said it would be interested in partnering with the CAB.

CAB Chair Bridges then reviewed a recommendation the DNFSB at Hanford made. It stated, "The safety culture at the Waste Treatment and Immobilization Plant is in need of prompt, major improvement, and that corrective action will only be successful and enduring if championed by the Secretary of Energy."

He then stated the CAB focus in 2011 is to get more input from DOE, to get more public involvement, and to focus on the idea of the CAB giving "more bang for the buck." He then introduced CAB member Wadley to provide an overview of the tour they took in Nevada during the SSAB Chairs' Meeting.

CAB member Wadley gave an overview of the tour he and CAB Chair Bridges took during the SSAB Chairs' meeting, showing a map slide of the Nevada Test Site, and stating how large it is. He also referred to slides that showed where SRS disposes of its waste at the Nevada Test Site, and where most of the detonations at the Nevada Test Site took place. He referred to more photos of projects that occurred at the Nevada Test Site, such as the Plowshare Project. He said they have a training facility at the Nevada Test Site for counterterrorism operations support; he said they have all types of equipment used for training in different scenarios.

CAB member Wadley summarized by stating the tour took up the better part of a day and gave them an idea of what was going on. He then spoke about Nevada Test Site anniversary booklets that were given out during the tour, and passed it around for the entire CAB to view.

CAB member Jayaraman stated, concerning the "bang for the buck" comments, that he thinks it is very important for the CAB to make sure they are fulfilling that request and are addressing this concern. He said the CAB is trying to be experts in areas they are not. He said they are trying to analyze technical, budget, and training aspects. He said most of the CAB members are not technical people, and don't know about budgets or training. He said they should think about what they constitute as a CAB and what is their expertise. He said the CAB's expertise is much more valuable than all of the technical, budget, and training expertise. He said the CAB is experts in what it represents: the public. He said they are there to represent the impacts made on the public, and not as technical experts. He said they are supposed to represent and fight for the things the public feels are having an adverse impact. He said he is not sure if they are doing this. He said the recommendations the CAB provides are important, but the Board is trying to play the role of technical experts, but that SRS is full of specialized experts who know everything. He said the CAB is part of the public and can question anything the people at SRS do, but he feels the Board should be a little more constructive.

AGENCY UPDATES

Zack Smith, Acting SRS Deputy Manager-DOE-SR

Mr. Smith announced some Department of Energy organizational changes, stating Dr. Tríay has stepped down from her position of Assistant Secretary of Environmental Management due to her need to take care of her parents. He stated Dave Huizenga, of NNSA, has stepped in for Dr. Tríay, and is working as the Acting Assistant Secretary for Environmental Management. He reviewed Mr. Huizenga's experience and background.

He said at the May CAB meeting, Dr. Dave Moody, SRS Site Manager, shared the Enterprise SRS vision with the CAB. He said it talks about the Site's new business direction and where they want to take SRS, with a great deal of focus on energy and independence. He added that the 2011 SRS Strategic Plan is out for stakeholder review and that each CAB member should have a copy. He said the period open for providing comments on the Strategic Plan is through August; he asked everyone to send their comments in by that time. Mr. Smith stated that the Enterprise SRS vision focuses on the physical and technological capabilities, as well as the intellectual capabilities, at the Site. He said they think SRS has a lot to offer.

He thanked everyone for their participation within the CAB, saying DOE greatly appreciates all of the CAB's efforts. He wished Dr. Tríay well, and said he looks forward to working with Mr. Huizenga in his new role. He introduced Fred Dohse, Savannah River Nuclear Solutions (SRNS).

Fred Dohse, Executive Vice President and Chief Operating Officer-SRNS

Mr. Dohse began his agency update by thanking the CAB for the important work it does. He said there was a serious injury on-site that occurred on July 1. He said a worker fell about 12 feet in the K-Reactor building. He said no one saw the worker fall, so the exact cause of the fall is unknown. He continued that two immediate actions were completed: first they tended to the worker's needs as he had significant injuries to his head and chest, and got him to MCG within 25 minutes. He said there was talk of the individual being released from the hospital. He said they also immediately stopped all work on scaffolding at SRS until they could determine the facts of the event, and created an internal investigation team. He said while they did not determine the exact cause of the fall, they did find some things that suggested SRNS's safety culture with that workgroup was not as good as it needed to be. He said this is the same group that produced 25 million safe hours of construction work on-site. He gave examples of how the safety culture was not as good as it could've been. Mr. Dohse said he thinks safety is important, and they have engaged their local Safety Improvement Teams.

He continued that he hears often that there are many distractions currently at SRS, and stated he is the source of much of that in regards to the recent workforce restructuring. He said the United States is dealing with budget challenges and the budget at the Site is a reflection of that challenge. He said these budget woes have affected budgeting for H Canyon and other activities at SRS. He said he is currently working to ensure the FY12 budget, and the people that he has in his workforce, are balanced. He listed how many workers have left the Site, voluntarily and involuntarily, since the restructuring began. He said he is looking at another 200-250 involuntary layoffs in August. He said when they entered into the workforce restructuring last fall, he promised his workforce that it would be done professionally, compassionately, and with empathy. He stated they also said they would have a transition center opened for displaced workers who needed to find other employment. He said the transition center opened at the end of March and so far about 70 workers have been placed with jobs. He provided an overview of the types of services the transition center provides, and what its goals are.

CAB Chair Bridges asked where SRNS is in the process of program cuts. Mr. Dohse said he thinks he can take a few more cuts for efficiency considerations. He said he is a big believer in lean manufacturing principles and in reviewing the value streams and processes used on-site in order to eliminate non value-added steps. He said there is no question that the FY12 budget being faced collectively will make it necessary to cut functions that no one wants to see cut.

CAB member Jayaraman said he is glad the Strategic Plan is available online and that everyone will receive a hard copy. He said they should master the document because it is the whole Strategic Plan for SRS. He continued that the plan focuses on three important goals: environmental stewardship, national security, and clean energy. He stated Dr. Moody reported the Site is moving in a positive direction. He said from a CAB point of view, the most important thing right now is the environmental clean-up. He said the CAB is there to talk more on that aspect. He said the environmental stewardship component seems to be taking care of the environmental clean-up operations at SRS. He said the other two things are not directly associated with environmental clean-up. He reminded the CAB to bear in mind that 90 percent of the problems at SRS are associated with environmental clean-up operations. He said when he looked through the Strategic Plan, the section on environmental stewardship did not reflect environmental clean-up as well as he would've liked.

Pat McGuire, Deputy Designated Federal Official (DDFO)-DOE

Mr. McGuire began his update by thanking Karen Guevara, DOE-SR, for her service as DDFO, and thanked Zack Smith and Fred Dohse, for their updates and presence at the meeting. He brought up the safety topic of proper hydration and reminded everyone to drink enough water during the summer.

He stated Mike Simmons, DOE-SR, informed the CAB via his presentation the previous day that the last shipment of the depleted uranium oxide (DUO) was completed the previous Friday. He said they shipped about 9,400 drums of DUO to the Nevada National Security Site for final disposal. He said those shipments represent about 2,800 curies and 391 trucks. He said there is an initiative to make more shipments by rail, but Nevada does not have a rail system so they had to make all the shipments by truck. He said the work was all done very safely and about nine weeks ahead of schedule.

He said at the end of June, access was sealed to the P and R Reactors as part of the footprint reduction goals. He stated the deactivation and decommissioning activities were performed in situ, with underground areas and vessels grouted in place to the 0' elevation, using about 260,000 cubic yards of concrete grout. He said that is equal to about 26,000 concrete trucks.

CAB Chair Bridges said, in regard to the P and R Reactors, would a person be able to actually walk up to them now with the work that has been done, and not be shut out by any barriers or fences. Mr. McGuire asked Helen Belencan, DOE-SR, to come up and speak about that. Ms. Belencan said the inner fences are coming down, so it will be an open area. She said security will control access to the Site and it is still considered a remote worker area, so workers are required to check-in.

Mr. McGuire said they recently achieved a major milestone by completing the bulk waste removal efforts on Tank 11. He said this is an operational step in the closure of Type 1 tanks. He said the next step toward

the ultimate closure of Tank 11 is to install the mixer pumps in order to start waste heel removal. He explained this is the first time in SRS history where there are 15 tanks in some form of closure process. He said they are making very good progress on removing waste from high level waste tanks. He said they are also continuing to make progress on constructing the new style disposal units for the low-activity salt waste materials; he reviewed the enhanced features of this new design.

He continued that they are continuing to dissolve uranium materials in H Canyon. He said they are extracting the uranium, blending it down to low enriched uranium, and then shipping those solutions to the Nuclear Fuel Services Facilities in Irwin, TN. He said they expect to complete shipping of that material in December, and then will begin flushing the H Canyon facility in order to have that in an inventoried state of bulk fissile material by the end of February of next year. He stated the Secretary of Energy has determined that no processing of UNF will occur until the recommendations from the BRC are issued and evaluated by DOE.

He sad in HB-Line, they are preparing to blend surplus nonpit plutonium with an additive, repackage that material in pipe overpack containers, and ship those containers to WIPP. He said they expect to make the first shipment to WIPP by the end of December.

CAB member Parson asked if the Emergency Preparedness Plan at SRS includes protection of electronic equipment from an electromagnetic pulse (EMP) that could result from a detonation of a nuclear weapon high in the atmosphere. Mr. McGuire said he would get an answer back for her.

CAB Chair Bridges said sometime back the old saltstone facilities had some indications of leaking and temporary measures were put into place. He asked how that played out.

Jim Folk, DOE-SR, asked if CAB Chair Bridges was referring to saltstone units 2A and 2B. CAB Chair Bridges said he was. Mr. Folk stated during that process there were some indications of moisture on the outside, so they ended up taking several additional steps in the construction process. He said they reinforced the outerband around the bottom of those vaults, added some additional sealant on the inside of the vaults, re-conducted the tests, and had no further indications of leaks. He said they have progressed onto the next phase of the project.

CAB member Simon said during the DNFSB meeting, the future of H Canyon was discussed. He said they spoke about three phases: modify operations, long-term, and permanent shut-down. He said as part of that plan, they address the resumption plan for operations to be developed by a contractor. He asked Mr. McGuire to elaborate on that. Mr. McGuire said they have directed the contractor to prepare a resumption plan for H Canyon prior to the end of this calendar year. He said if DOE is not going to have an increase in funding or partnerships with other agencies, it will need to comply with the budget that's expected to be approved, and therefore that would not allow future operations within H Canyon. He continued that DOE wants to document how it leaves various unit operations, what the state of those conditions are, and what people may be let go. He said when, and if, a decision is made to resume operations, DOE will know what the states of those facilities and operations are, and what staff they will need to hire, retrain and re-qualify in order to resume traditional operations within H Canyon.

David Williams-Environmental Protection Agency (EPA)

Mr. Williams said a couple of times a year EPA enters into national negotiations over the EPA budget. He said in the negotiations for the budgets, one of the key components that establishes the budget for the next year are the accomplishments that are part of the Federal Facility Agreement (FFA) throughout the country. He said Region 4, of EPA, every year has approximately 30 percent of all the national targets, measures, and accomplishments. He added this is out of 10 regions. He stated in Region 4, at least 40 percent of those national targets, measures, and accomplishments come from the work done at SRS. He said SRS is the most significant site in EPA's program as far as environmental work goes.

He announced there have been some employee transitions within Region 4, with Cathy Amoroso and Rachel Hall moving on to work on the private Superfund side, and the hiring of a new Regional Program

Manager (RPM), Deidre Lloyd. He reviewed Ms. Lloyd's experience and background. He then introduced an EPA intern, Ashly Claybourne, who he said has been a valuable asset, and Jonathan Walsh, who is joining Region 4 on a detail from EPA Headquarters where he is working on the WIPP side. Mr. Williams continued that an Environmental Justice meeting was held in Aiken and Graniteville on July 12. He then reviewed the key discussion topics. He said the third round of Superfund Job Training will be the last round due to a loss of funding.

He said EPA has been involved in a large amount of Site work since the last CAB meeting. He stated several major projects funded under the Recovery Act have been completed or are nearing completion. He said EPA has conducted a number of field walk-downs in preparation of the completion of field work, and has participated in a number of meetings. He said EPA is maintaining a weekly field oversight effort at SRS using its support contractor. He then reviewed some recent highlights of the combined efforts of the three parties associated with the FFA at SRS.

He said he gets asked why EPA is so successful at SRS, and he says that even some of the bigger sites don't have the coordination or the accomplishments that are achieved at SRS. He said a significant amount of that stems from the commitment to the environmental mission, the transparency, and communication experienced at SRS on a regular basis. He said he wishes they had that at other Region 4 DOE sites.

Shelly Wilson-South Carolina Department of Health and Environmental Control (SCDHEC)

Ms. Wilson introduced Kim Newell, SCDHEC, to give an update on radium in the drinking water. Ms. Newell said the limit on radium in the drinking water that was talked about at the Environmental Justice meeting was in the Aiken Water System, which is inspected quarterly. She said those numbers are average. She said they did have a hit of naturally occurring radium in a location north of Aiken. She said to put that in perspective, in order for there to be an increased risk to the public for drinking that water, one would have to drink at least two to three liters a day for about 70 years.

Ms. Wilson then introduced Heather Cathcart, SCDHEC, to give an update on clean-up. Ms. Cathcart stated since the last Full Board meeting and through the end of July, SCDHEC, in conjunction with EPA and DOE, viewed a total of 17 documents. She said some of these documents included the D-Area Operable Unit Early Action ROD, the C-Area Groundwater Operable Units Statement and Basis Proposed Plan, the FFA Appendix C and K, the H-Tank Farm Performance Assessment, the F-Tank Farm Groundwater Monitoring Plan, and the High Level Waste Tanks 18 and 19 Closure Modules. She added during this time SCDEHC attended five meetings focusing on the High Level Waste Tanks, and attended two walk-downs signifying the completion or closure of the Heavy Water Components Test Reactor (HWCTR), and the R-Area Disassembly Basin Cap. She continued that SCDHEC has constant oversight of all the ARRA activities.

Ms. Wilson said you can see by what Ms. Newell and Ms. Cathcart reported on that one can see a lot of work has been done and many accomplishments have been achieved. She said this is because SCDHEC has such a committed clean-up team that's very effective and efficient, and made up of DOE, EPA, and SCDHEC workers.

She said Tank 18 and 19 are the high level tanks, and the closure modules are specific details of the proposed closure of the tanks. She said there was one round of comments made previously, the Site responded with the revised closure module, and on July 8 a second round of comments were issued. She said when SCDHEC receives the revised closure module back from DOE, it will be expected to go out for public notice. She said anyone from the public is free to look at that closure module as it is not a closed document, but she expects in August it will go out for an official public review and comment period. She continued that in early July, the US Circuit Court of Appeals for the District of Columbia made a decision regarding Yucca Mountain. She stated in the early part of 2010, DOE made a motion to withdraw the application for Yucca Mountain from the NRC. She said the State of South Carolina, along with other parties, appealed that, and in early July, the court decided it was not timely to make a decision because NRC had not made a final determination on DOE's request to withdraw its application. She said she has not heard if there would be any follow-up actions from South Carolina's Attorney General.

Ms. Wilson said SCDHEC is very pleased about progress in reduction of legacy waste at SRS.

Zack Smith, SRS Deputy Manager-DOE-SR

Mr. Smith returned to speak in regards to CAB member Jayaraman's earlier comments concerning the 2011 Strategic Plan. He said he thinks they are on the same page. He said Environmental Stewardship is one of the main cornerstones of the Strategic Plan and what DOE sees going forward. He continued that SRS has to be second to none in environmental clean-up to be able to market its abilities, so DOE can assure that is not lost. He said SRS has to be successful in continuing waste removal from tanks and mobilization in the clean-up of the Site. He said the outside will only want SRS's services, and skills, if it demonstrates it is exceptional.

PUBLIC COMMENTS

Suzanne Rhodes, SC League of Women Voters, said the League of Women Voters has been noticing the SRS CAB has reportedly supported temporary commercial spent fuel storage at SRS. She said this is of great concern to the League. She said the League approves of the CAB and its path forward, and they want to be with the CAB on that goal. She said the League is among the groups advocating for attention to the 30 years of accumulated waste at SRS. She continued that in the 80s, they felt they were successful as part of a team that influenced federal funding of legacy waste at SRS and other sites. She said since then SRS has made great progress. She stated CAB Chair Bridges said the BRC disapproved of DOE's operations of the waste plan at Yucca Mountain. She said her reading was that the BRC disapproved of Congress meddling in the program, and she looks forward to going back and rereading that.

She stated she hopes federal policies and funding will continue to support SRS activities, and the final removal for safe disposal. She said, in the meantime, the League is very comfortable with the safety issues at SRS. She said the League feels the collective attention of the nuclear industry, and the communities that benefit from nuclear power and research, are necessary if the commercial waste problem will be funded and solved. She said currently about 70 congressional districts, in about 30 states, share the League's collective concern. She said South Carolina needs their continued concern, as well as the concern of the generators and the larger nuclear community. She said the League worries that once the waste is the property of tax payers, in one or two congressional districts, concern will fade as it did in Nevada. She said the isolation of spent fuel rods at an out-of-the-way site can allow for other priorities to overtake. She said the League was against the Yucca Mountain site because it lacked several important safety requirements.

She continued that successful reprocessing has been taken for granted by local proponents. She said although France has been vigorously promoting spent fuel reprocessing, there's been fading in international interest. She said employees of the nuclear industry have a lot to gain with the addition of new, very interesting jobs, but they would be funded by the tax payers. She said independent groups have studied reprocessing and have reported it is expensive and does not solve the high level waste problem.

She asked the CAB to please consider the consequences of allowing SNF to be stored at SRS. She said tax payers and South Carolina has much to lose.

Sam Booher, Augusta, thanked DOE and SRS for having a CAB, and then applauded the CAB members for serving on the CAB and taking time from their lives to represent the public. He said SRS has a department that coordinates NEPA activities, and as those NEPA activities go through the chain of events, at the end they go out to the public for comment. He said he is concerned as to how many in a leadership role within the CAB are in contact and receive NEPA notices, and respond back. He said it takes someone who is informed about SRS to respond to these NEPA comments, and he said the CAB is some of the most informed. He encouraged the CAB to create a matrix to track NEPA public comment requests.

He said there was supposed to be a NEPA going out to the public in February concerning a Memorandum of Agreement between the Department of Defense and DOE. He said the last NEPA bulletin stated it was going to be out in July, but it's getting pretty late in July and it's not out yet. He said it is moving along and

will come out soon. He said in that Memorandum of Agreement, the Army wants to send soldiers to train at SRS; he said he thinks it's a great idea. He said he is retired Army, and during training, the Army performs a lot of cross country land navigation. He said one of the big things the Army does when training is go into streams. He said he has already contacted SRS about this concern. He said if you go into streams on the North side of SRS, you're probably pretty safe, but there are streams on the South side of SRS that nobody should ever go into. He stated many years ago one of the ways of getting rid of legacy waste was to take the drums and dump them into the streams. He said there is contamination in the sediment of streams at SRS that soldiers shouldn't go into, and it concerns him. He said he knows SRNL now monitors the streams and checks the sediment contamination; he encouraged the CAB to support them in order to better identify which streams the soldiers shouldn't go into. He said the previous day, when he heard about how all the legacy waste is being dispositioned, he was left wondering if that includes the legacy waste that is in the sediment of many streams at SRS.

Tom Clements, Friends of the Earth, said he confirmed the previous day with the BRC that its draft report is coming out on that Friday as anticipated. He said one of the key BRC recommendations is likely to be "Consolidated Interim Storage of Spent Nuclear Fuel (SNF)." He said a SRNS official has already publicly acknowledged that it's being looked at to consolidate SNF storage at SRS. He said he thinks that's going to be of great concern at the state level if that is pursued.

He said he was on the NRC Panel on the Development of Reprocessing Regulations in June. He said he thinks some draft regulations might be developed to a certain point, but he doesn't think they're going to go anywhere because the BRC is not going to recommend for pursuit of reprocessing at this time. He said the NRC did affirm at that panel meeting that they're going to stick with the legally defined term of "Spent Nuclear Fuel." He said he is confused why DOE continually and repeatedly is not following the legal definition of this term. He said it has unfortunately politically tainted the use of the term "Used Nuclear Fuel," which implies it can be reprocessed, producing a host of waste streams and separated plutonium. He said the Nuclear Waste Policy Act of 1982 defines Spent Nuclear Fuel. He said there is no Used Nuclear Fuel definition in regulation or law; he defined Spent Nuclear Fuel. He said he wrote a letter back in January asking where the term Used Nuclear Fuel came from and for what reason. He said he got a call back from DOE HQ six months later.

Mr. Clements said in the 2011 draft Strategic Plan, the section "Develop Solutions to Close the Nuclear Fuel Cycle" has some egregious errors. He read an excerpt from the Plan and commented on it. He said reprocessing is a dying industry and much of the material is not reused. He said the comments promoting it in the Strategic Plan are political and are trying to gain more support for reprocessing in South Carolina. He said it is a wrong track for the DOE to go down where it gives misrepresentations in official documents. He said he thinks it hurts SRS when things like that are in print.

He said he would be meeting with a Senator in California who is the head of the Energy and Water Subcommittee of Appropriations, which deals with DOE funding. He said he will be glad to support, as he always does, continued funding for DOE Environmental Management Programs, but when it comes to things such as reaching for reprocessing at SRS, and consolidating Spent Fuel Storage, he will speak out against those things. He said he would like to see the next time the Strategic Plan is talked about where the private funding or backing would come from.

After the public comment period, Erica Williams introduced Gerri Flemming, DOE-SR and Federal CAB Coordinator, who wanted to make a few comments to the CAB and introduce a DOE intern, Candice Morales.

Ms. Flemming said each year DOE, and SRS, hosts interns during the summer. She said these interns are offered a hint of what the business world is like before they enter the real world. She introduced Candice Morales, from Winston Salem State University, who has been working as a DOE intern for Ms. Flemming, with the SRS CAB Program.

Ms. Morales introduced herself and said she had been working with the CAB Support Team for almost two months. She said she was glad to be able to attend the CAB meeting so to see how the CAB really works and also to see how hard the CAB Support Team works, and how much effort they put into the meetings.

COMMITTEE UPDATE: Administrative Committee

Kathe Golden, Administrative Committee Chair and CAB member, began her update by stating the CAB membership drive is ongoing. She asked everyone to take a membership packet and give it to someone who they think will be a good member. She went over the information in the packet. She informed CAB members if their term is about to expire, they too need to complete another application in order to be reconsidered for membership to the CAB. She continued by stating online meetings are ongoing for committee meetings. She encouraged everyone to introduce others to the CAB by inviting them to a meeting online. She then informed everyone of the CAB's shorter web address: http://cab.srs.gov

CAB member Golden said the CAB has been having problems creating recommendations and one of the reasons why could be that the CAB is not receiving enough information. She said perhaps they don't have enough information because the CAB has not been meeting as it had in the past. She said, in the past between Combined Committee and Full Board meetings, there could be as many as two meetings for each committee. She said she is not the one to decide this, but wanted to suggest to everyone that the CAB may benefit from increasing individual committee meetings. She said this is something the CAB needs to think about.

She thanked Mr. McGuire for his earlier safety topic concerning proper hydration. She said the safety culture at SRS does not stop at the borders of the Site. She said it spills out to the community making everyone safer.

She told everyone the newest edition of the Board Beat was available on the public table and on the CAB's website. She said the Support Team has been working very hard on the membership drive; she outlined all the membership tasks the Support Team had been working on.

CAB member Bernard asked how many membership applications the CAB has so far. Ms. Williams said so far the CAB has seven. CAB Chair Bridges asked if these applications were new. Ms. Williams said they are

CAB member Jayaraman said he is glad CAB member Golden spoke about the committee meetings. He said he thinks there should be more committee meetings and that he has learned from attending committee meetings. He said it is difficult for him to see how a new member attending a meeting once in two months can understand what is going on. He said they should ensure the new members in particular attend the committee meetings.

CAB member Parson asked what the policy on replacing CAB members that resign during the year is. Ms. Flemming, DOE-SR, said if in the midst of a membership campaign, the vacancy would remain until the positions already opened were filled, and the new vacancies would be filled along with them. CAB member Parson said that's unfortunate and disagreed with the policy. CAB member Bernard said there are provisions in the internal processes that deal with replacing members. CAB member Jayaraman said he thinks the current policy is sound. He said there is no emergency to replace members. Ms. Flemming said it wouldn't be a difficult process to fill as a vacancy occurs, but the problem is having an adequate candidate waiting in the wings to be placed in an open spot. She said one way the CAB can aid this process is to take the membership packets, collect applications, and should vacancies occur in between membership campaigns, the CAB will have a pool to draw from. CAB member Parson asked if the CAB still had last year's pool of applicants. Ms. Flemming said that not everyone who applies is eligible. Ms. Williams said there was only one applicant left over, who was an alternate. She said the CAB Support Team contacts anyone who has previously applied and it's up to them to reapply.

COMMITTEE UPDATE: Nuclear Materials Committee

John Snedeker, NM co-Chair and CAB member, began his update by listing the members of the NM Committee. He said the NM Committee has three open recommendations and two pending recommendations. He stated Recommendation 263, which was adopted in May 2009, is shared with the WM Committee. He reviewed the recommendation, and said there have been obstructions to accomplishing the goals agreed upon in the recommendation. He then reviewed Recommendation 266, stating it was adopted in September 2009. He said he had a note from CAB Chair Bridges that Recommendation 266 is nearly two years old, and it should be either kept active or considered closed. He asked CAB Chair Bridges if he had anything to say concerning Recommendation 266.

CAB Chair Bridges stated he suggests the CAB keep Recommendation 266 open until DOE makes a decision or tells the CAB what path it is going to follow.

CAB member Snedeker then reviewed Recommendation 271, and read through the DOE Response to Recommendation 271; he said the response was not definitive and the CAB should push DOE to give a more comprehensive response. Pat McGuire, DOE-SR, commented, in regards to the DOE Response to Recommendation 271, the response is still adequate. He stated in those responses, DOE said the disposition for the surplus nonpit plutonium is contingent upon the decision from the Surplus Plutonium Environmental Impact Statement, which is still in progress. He said the response is still pertinent and representative of where DOE is in the progress. CAB Chair Bridges said, as he understands it, the first five tons of difficult to handle material is going to be processed out. He said Mr. McGuire gave a schedule the day before that extends five years or so. He said the rest of it is going to be folded into MOX, but until the CAB receives a definite schedule, he wants to keep Recommendation 271 open.

CAB member Snedeker then reviewed the two pending NM Committee recommendations, 275 and 276. He referred to the NRC public meeting, which was held in June. He said CAB member, and NM co-Chair, Rose Hayes attended the meeting. He summarized what NRC discussed at the meeting, highlighting presenter comments from the meeting, and then introduced Dawn Gillas, DOE-SR, who was giving a presentation to the NM Committee.

PRESENTATION

SRS Used Nuclear Fuel Management-Dawn Gillas, DOE-SR

Ms. Gillas began her presentation by stating its purpose. She then reviewed the project's mission, stating the L Area Complex (LAC) is operational for receipt and wet storage of UNF, Foreign Research Reactor (FRR) SNF receipts are part of NNSA's Global Threat Reduction Initiative, which supports the removal of highly enriched uranium (HEU) from civilian reactor sites worldwide. She continued with the mission, stating Domestic Research Reactor (DRR) receipts support domestic nuclear research, and because of the significant amount of useable uranium content in SNF, the term UNF is now being used interchangeably.

She showed a diagram of the floor plan of the L Area Basin, highlighting a photo of vertical tube storage (VTS). She then presented a typical fuel assembly model, which was passed around the CAB table for members to see. Ms. Gillas continued reviewing more UNF storage options, including photos of HFIR storage, dry fuel storage, and bucket storage. She also reviewed the L Area Basin again, noting available floor space, and the dry cave.

She continued by reviewing the current capacity for UNF storage, and how full they are. She referred to a graph that listed the storage type, the total approved positions, positions filled, and the percent filled. She used HFIR storage as an example, stating it has 120 total approved positions, 118 of those positions are filled, which equals to 98 percent filled overall. She said they will be filled with HFIR before the end of the year, and will need to receive more in the 2014 time period. She also addressed other storage types on the graph such as VTS, dry cave, bucket row storage, bucket racks, dry fuel storage area 1, oversized can racks, and dry fuel storage area 2. Ms. Gillas then reviewed the UNF inventory, showing a photo of a HFIR; she

noted there is an inner core and an outer core within a HFIR. She referred to different types of research reactor fuels. She commented that at this time, they have 12,860 Aluminum-based UNF assemblies, 239 Higher Actinide Targets assemblies, and 1,976 Non-Al-Based UNF "items."

She reviewed a graph of the UNF receipt forecast, or plan, which spanned from 2011 to 2019. She said the EIS for foreign fuel does not allow DOE to receive after 2019. She added there is no current restriction on the receipt of domestic fuel. She explained that the graph shows the estimated number of assemblies, the type, location, the name of the reactor, and the fiscal year. She then referred to a slide with photos of the types of SNF casks received.

Ms. Gillas said DOE has a study that was done by SRNL on what it would take to continue using the Basin for longer-term storage with the assumption that with not being able to process in H Canyon there will be a need to store the fuel until there is a disposition path. She reviewed the study SRNL conducted, stating technical bases and well-founded technologies have been established to store SNF in the L Basin, as well as the methodologies used to evaluate, and structural analyses being performed against present National Phenomena Hazards criteria. She explained that the study said, with certain things augmented, DOE can store in the L Basin for up to or greater than 50 years, safely. She listed the activities that would need to be done to ensure this. She said they have asked the contractor to come up with an Augmented Surveillance and Maintenance Plan by the end of the year. She then reviewed a table with UNF processing candidates, stating it came from the 1996 Spent Fuel EIS.

She reviewed the vulnerable UNF in L Basin, stating it is less than 1 percent of the total inventory. She said the SREL fuel is the older UNF that had been stored in another facility at SRS and was moved to L Basin in 2003. She said all was handled recently and some was repackaged to move. She added that if there is a "failure," the Basin cleaning systems will handle any contamination. She then moved onto the L-Area Status, stating preparations to start shipping UNF from L to H Area were completed in 2010, the UNF disposition strategy is awaiting results of the BRC recommendations in January 2012, and the current strategy does not include processing UNF or the implementation of the INL fuel exchange. She continued that the L Area Crane is now fully operational.

She summarized her presentation by stating they are going to continue to store both foreign and domestic fuel, additional UNF may be added to the Baseline, there will be no chemical processing of UNF, and no INL fuel exchange. She said they will maintain the L Basin in a safe and secure manner until an alternate disposition path is indentified and implemented.

CAB member Mary Davis asked for an example of Civilian Reactor Sites. Ms. Gillas stated those reactor sites are not from the United States. She said when NNSA says it has a certain type of fuel, DOE has to deal with the fuel in order to bring it in, but the reactors it comes from are beyond her scope.

CAB member Burke asked what is it about the political climate in South Africa that makes the material there particularly at risk. Ms. Gillas said she cannot discuss that.

CAB member Greene-McLeod asked what would happen if all the water drained out of the Basin. Ms. Gillas said if all the water drained out, it would not be like Fukishima and the fuel would not melt. She said before the fuel can even be shipped, the HFIR cores have to sit for 30 months at HFIR before they can be put into a cask. She said all the fuel in the Basin is cool enough that it would not melt; however, there would be a high radiation field, so more water would have to be put back in. She added that the probability of that happening is very low.

CAB Chair Bridges asked when they plan to say "this is how we will disposition Spent Fuel." Ms. Gillas deferred to Mr. McGuire, who stated until DOE evaluates the BRC Recommendations, DOE will not process any fuel in H Canyon. He said although it is safe in wet storage, if they do not process, there is no intention to keep it permanently in wet storage. He said they are starting to look at dry storage configurations, but there is no commitment or funding to do that. He added, in regard to safety, there is no urgency in dispositioning UNF. He said DOE wants to make a thoughtful long-term decision regarding the material.

CAB Chair Bridges said he is very concerned about the dispositioning of UNF and says he will offer it up as a CAB Recommendation. CAB member Greene-McLeod said she is also very concerned about the disposition of this material that was not supposed to come to the state of South Carolina. She said he has heard it all before, but she feels like she needs to say it again-the material is not supposed to come to the state unless it has a path out, and she is not hearing any path out. She said, to her, if safe storage is disposal, call it disposal, and give South Carolina a lot of money for being Yucca Mountain.

COMMITTEE UPDATE, CONTINUED: NM

CAB member Snedeker closed the NM Committee update by saying National Public Radio (NPR) typically has at least one report a day on the nuclear industry, and SRS in particular. He said there was a shipment made through the Port of Savannah the previous week on the Atlantic Osprey, which was created specifically to move nuclear fuel. He said he thinks the shipment was from France, with a destination of Los Alamos. He said it went by truck. He said Savannah has always been concerned about nuclear safety, but this shipment went through and no one said anything.

COMMITTEE UPDATE: Strategic & Legacy Management (S&LM)

Jerry Wadley, S&LM Chair and CAB member, began his update by listing all S&LM Committee members. He announced when the next S&LM meeting would be. He said the committee has three open recommendations: 262, 272, and 277. He reviewed the DOE Response to Recommendation 277. He said he would close Recommendation 277 at the next S&LM committee meeting. He then introduced Helen Belencan, DOE-SR, to provide a presentation.

PRESENTATION

Asset Revitalization Task Force-Helen Belencan, DOE-SR

Ms. Belencan began her presentation by stating its purpose, and then reviewed President Obama's State of the Union address. She said that is part of what got asset revitalization started. She said the president has called for new investments in American innovations, is challenging the country to look at better ways to meet energy demands, and is calling for 80 percent of America's electricity to come from clean sources by 2035. She added that there is a very strong call for making the government a leaner and smarter operation, and to look at the vast array of assets the government currently holds; she defined examples of these assets.

She continued that there are things happening within EM that is driving DOE to look at the Asset Revitalization Initiative (ARI). She spoke about the Recovery Act and footprint reduction, stating this means more assets will be available, and said the size of the EM contractor workforce will be reduced. She reviewed NNSA infrastructure modernization, stating they are consolidating their functions into fewer key laboratory and site-type operations. She addressed the president's sustainability goals, saying they should drive infrastructure investments and increase coordination across agencies. Ms. Belencan said within DOE, and largely driven by the Recovery Act, there is a large focus, through the loan guarantee program, on all manners of energy initiatives. She reviewed a graph that highlighted the progress made within EM in footprint reduction.

She listed and reviewed potential assets, which included safety culture, site environmental characterization data, highly trained and experienced workers, equipment, land and buffer zones, structures, facilities, roads, rail lines, electricity transmission facilities or grid connections, natural resources, energy resources, and an available non-DOE community and regional assets.

She stated that back in January 2011, the National Defense Authorization Act included language that specifically directed DOE to establish a task force. She said at that time, the focus was on Energy Parks. She said if one looks at the list of potential assets, they'll see the potential is far greater than just an Energy Park focus. She said the definition was therefore broadened to the discussion of asset revitalization so that

under that broader umbrella, more projects could be covered. She said it gave DOE a chance to look more widely.

She continued that the task force was established in February 2011, and then listed the ARI Task Force purpose and goals. She focused on the development of the corporate definition of asset revitalization, defining it. She said one of the things they learned at their first meeting is that when one looks at the entire DOE, there is a broad array of resources, assets, and capabilities that are not oftentimes shared across all organizations. She reviewed the organizations that have federal staff that is part of the ARI Task Force. She said everyone brings a unique capability and perspective. She stated Dave Geiser, who is the director of the Office of Legacy Management, is leading the ARI Task Force.

She stated the ARI Task Force is divided into three teams, with co-leaders from a field office and a Headquarters office. She listed the three teams as Issues and Strategies, Outreach (Internal and External), and Assets and Projects. She said input has been received from the Energy Communities Alliance, local governments, and the Community Reuse Organizations.

Ms. Belencan summarized her presentation by stating the ARI Task Force is focused on cross-cutting issues, the report to Congress is in final concurrence, having just received comments from the Office of Management and Budget, and the report to the Under Secretaries of Energy, Science, and Nuclear Security is in preparation, and is due in August.

CAB member Wadley said he thinks the ARI Task Force is great, but as an advisory Board, he isn't sure how the CAB can have any input to it. Ms. Belencan said the most important thing the CAB can focus on is input to the Site Strategic Plan, which is currently out for public comment. She said the Plan really brings asset revitalization home.

CAB Chair Bridges asked if Ms. Belencan thinks the report will come up with some broad guidelines and direction for DOE, or will it have broad guidelines, and say "Oh, by the way Savannah River (Site) do this, this, and this." Ms. Belencan said it will not say "Oh, by the way Savannah River, do this, this, and this." She said it will be more broadly focused at the policy and guidance level.

PUBLIC COMMENT

Patricia Carpenter McCracken, Augusta, said when you walk into the CAB meeting, there is a very large table with a number of documents. She said she thinks she was told, and it wasn't explained too clearly, that there are different forms you're supposed to sign-up for. She said you sign-up for one form if you want something written, and another form if you want to speak at the meeting. She said when she came in today, Mr. Booher, public, was speaking, and there was a yellow form on the table. She said there is nothing on the form that says it's for the written comment. She said apparently there is another form you must sign in order to speak. She said she wanted to speak because she heard Mr. Booher make comments as she came in. She said it should be that people in the audience should be able to ask a question of people who just come forward and make a comment. She said she thinks the pink sign-in sheet was removed. She stated there is no way for anyone to know, unless you're some type of insider professional speaker, which form to sign. She said there should be some oversight people at the meeting, from the State or EPA, for people who walk in. She said she thinks the mission for the CAB has something to do with outreach.

She continued that Mr. Booher was making some strong allegations about streams being contaminated. She said he made no reference to any document or report, and nobody asked him for his documentation that stated the military cannot go on certain areas of the Site. She said the deer are running all over the Site, and they invited all the veterans over to hunt and then put the deer in their cars. She said those are some strong allegations. She said she hoped everyone would review that.

She stated the day before that there was an excellent presentation after the meeting by DOE, the USDA, and the South Carolina college students. She said there was a scheduling problem according to one of the teachers, and they had to leave. She said those posters should've been out the entire time, and the students

didn't have a chance to fully display their posters. She said they should be re-invited and given another chance. She said she doesn't think everyone went and looked at them.

She repeated her earlier comments concerning the SRS Historic Preservation Program and then said Congress did not test any of the soil before they settled on SRS. She said she read on the internet that there were a lot of problems about compaction and building these buildings with DuPont. She said there was a development of the first soil science at SRS. She said there was probably a lot of science that was invented that should be included when they talk about the Cold War history projects.

COMMITTEE UPDATE, CONTINUED: S&LM

The CAB voted on whether or not they wanted the CAB Chair to sign on the three SSAB Chairs' Recommendation.

The first recommendation dealt with Asset Retention. CAB Chair Bridges briefly reviewed the recommendation again, and opened it for a vote. The recommendation was approved for signature.

The second recommendation dealt with allowing transportation costs in some cases to be considered a disposition cost. CAB Chair Bridges briefly reviewed the recommendation again, and opened it for a vote. The recommendation was approved for signature, CAB member Jayaraman voting "opposed." He stated his reason for opposing was because it is unfair if some funds are allocated for the disposal of a particular thing, it cannot be canceled because someone else wants to cancel it, take it, or take care of it. He said it is not logical.

The third recommendation encouraged DOE to look at every opportunity to use rail transportation. CAB Chair Bridges briefly reviewed the recommendation again, and opened it for a vote. The recommendation was approved for signature.

CAB member Wadley then introduced Rich Olsen, DOE-SR, who would be presenting to the CAB.

PRESENTATION

SRS Performance Measures Update-Rich Olsen, DOE-SR

Mr. Olsen began his presentation by stating its purpose, and then went into the Lifecycle Baseline, stating it is the basis of all the metrics and clean-up programs at SRS. He said in the 90s, each of the sites within the complex developed a Lifecycle Plan for clean-up. He said SRS's Plan for the clean-up program includes the scope, cost and schedule, and was originally established in the 1990s. He said in the 90s, the estimated budget for clean-up was \$50 billion and was estimated to take about 40 to 50 years. He said SRS is in its 15th year of serious clean-up; the metrics were established in reference to that. He stated the Performance Measures have evolved to track progress towards Lifecycle Baseline targets. He then referred to a diagram that showed the four major categories of clean-up at SRS: Liquid Waste, Solid Waste, Nuclear Materials, and Soil, Groundwater & Facilities.

He reviewed a diagram that addressed progress towards EM Site clean-up through June FY 2011. He said there are 12 metrics that serve as indicators of how well they're doing. He addressed all of these metrics, going through the end state complete FY09, FY10, and FY11.

He reviewed Liquid Waste, and referred to four graphical analyses and lifecycle projections graphs that depicted different functions within the Liquid Waste Program, complete with actuals, and targets. He noted that the targets were based on the Liquid Waste System Plan Rev. 16. These graphs covered the following metrics: produce canisters, process salt solution, close old style tanks-single wall, and close newer style tanks-double wall.

He reviewed graphical analyses and lifecycle projections for Solid Waste, referring to two graphs that covered TRU waste disposal and Mixed Low Level and Low Level Waste.

Mr. Olsen then reviewed the graphical analyses and lifecycle projections for Nuclear Materials, addressing four graphs that were labeled as highly enriched uranium (HEU), UNF Disposition: Blend down & Ship, Plutonium (Pu) Disposition: Dissolve in H Canyon, and Plutonium (Pu) Disposition: Other Paths. He noted that two charts, the UNF Disposition: Blend down & Ship, and Pu Disposition: Other Paths, were currently blank. He said the UNF Disposition: Blend down & Ship is blank because DOE is currently waiting for a Record of Decision (ROD,) and Pu Disposition: Other paths, is blank because DOE is evaluating various disposition paths.

He reviewed the graphical analyses and lifecycle projections for Area Completion, stating this focused on the waste sites. He referred to two separate charts within this area; these charts were titled Waste Sites Remediated and Facilities Deactivated & Decommissioned (D&D).

He summarized his presentation by stating the path forward. He said DOE will continue to update and validate the lifecycle measures going forward, including graphs, for the key operational areas for EM clean-up operations. He added that any suggestions from CAB members on additional improvements were welcomed.

CAB Chair Bridges said the only missing element he sees is footprint reduction. Mr. Olsen said they did have that originally in the graphs, but in the sense of keeping the amount of information down, he notes that footprint reduction is a result of doing the other actions; he said they will go back and look into adding it as a metric.

COMMITTEE UPDATE: Waste Management (WM) Committee

CAB member and WM Committee Chair, Emile Bernard, began his update by listing his committee members, and what area he had assigned them to, and welcoming everyone to the CAB meeting. He announced the next WM Committee meeting; he asked everyone to attend. He reviewed the WM Committee open recommendations, stating many have been opened for a long time. He said he wanted to look them over to see which ones he can close.

He added that he had arranged a conference call with his committee a few weeks prior and it went very well. He said it was a good option, and encouraged everyone to do the same. He called them "work-group sessions." He thanked the SRS CAB Support Team and Site personnel for all the help they have provided him.

He introduced Bert Crapse, DOE-SR, who was providing a presentation on the SRS TRU Waste Program.

PRESENTATION

SRS Transuranic (TRU) Waste Program-Bert Crapse, DOE-SR

Mr. Crapse introduced himself and reviewed his presentation agenda. He provided a definition of TRU waste, stating it is "transuranic nuclides." He said it has to have a greater concentration than 100 nanocuries per gram, a half-life greater than 20 years, has to be DOE waste only, and fits into two general categories: Contact Handle and Remote Handle.

He reviewed the Waste Isolation Pilot Plant (WIPP), stating it is a facility specific for disposal of TRU waste. He said it is located in Carlsbad, New Mexico, and the disposal mine is 2,100 feet below the surface in salt formation. Mr. Crapse continued that the salt formation goes all the way to Oklahoma and down to Mexico. He said it is a very extensive process they go through to characterize and certify the waste before it is sent to WIPP. He said this waste has its own special shipping container and there is a fleet of trucks, managed by DOE, that ships the waste. He said WIPP was constructed in the early 90s, but it received its first shipment in 1999. He showed some photos of shipping containers and the WIPP facility.

CAB Chair Bridges asked if they close off rooms [in WIPP] after they use a good portion of them. Mr. Crapse said they don't. He said they have a man-made barrier, but don't physically go in there and close rooms. He said they do create doors with ventilation. John Walsh, EPA, who works in regulating WIPP, said when a waste panel is completed, a metal bulkhead goes in place, and the final panel closure is a combination of an explosion wall, and an engineered backfill. He said that actually is currently under debate and will have to do with facility closure. He said there is a process for closing off a waste panel wall when it's done, and the bulkhead and explosion wall are mainly dealt with by the State of Mexico's environmental department.

Mr. Crapse gave a brief history of SRS Legacy TRU Waste, stating it is mostly job control waste contaminated with mainly Pu-238 and Pu-239 TRU isotopes. He said it has been generated and stored since 1972, with 11,650 cubic meters in storage in 2002. He said when SRS first started shipping TRU waste to WIPP in 2001, they determined what they refer to as "legacy waste" so they would know how to manage and track progress towards the final legacy waste disposal. He said they have received small portions of waste from off-site over the years. He then showed some photos of containers, including a Standard Large Box, a Standard Waste Box, and a Ten Drum Overpack. He also reviewed a graph that showed the Recovery Act Funded Accelerated TRU Project Status, and photos of TRU Pad 1, which is the oldest waste. He reviewed another graph, titled "Legacy TRU Waste Disposition to Date," with a goal of 12,000 cumulative volume disposed.

He summarized his presentation by stating they are close to finishing legacy TRU waste disposition, all the key initiatives needed to complete the project are in place, and the RA project to disposition 5,000 cubic meters by December 2012 is on schedule.

CAB member Parson asked why WIPP is called a "pilot plant." Mr. Crapse said he doesn't know the history, but assured CAB member Parson that WIPP is not a temporary facility.

CAB member Stan Howard asked Mr. Crapse to expand on "contact handling." He asked if this is manhandling or equipment-handling, and which container is it. Mr. Crapse said it is the waste container. He said they can basically manhandle that container, but with a remote handle, they use equipment at a distance to handle the container.

RECOMMENDATION VOTING

SRS Waste & By-Products Matrix

CAB member Golden made grammatical changes to part four of the recommendation. CAB member Burke asked if anyone had any questions concerning the recommendation. He called for a motion to vote on the recommendation; it was approved and received a second. The recommendation was approved with the majority vote.

COMMITTEE UPDATE, CONTINUED: WM

CAB member Bernard reviewed upcoming tasks he feels his committee should be working on. He said he had the DOE Response to Recommendation 274; he reviewed it. He said he is happy with the response; he said he thinks they will close Recommendation 274 and open another. He then spoke about focus groups. He said he has heard that DOE Headquarters is not happy with the SRS CAB's performance in regard to recommendation quantity and quality; he suggested a CAB self-evaluation.

COMMITTEE UPDATE: Facilities Disposition & Site Remediation (FD&SR)

CAB member and FD&SR Chair, Marolyn Parson, began her presentation by stating there is an environmental report that is published annually for SRS, and every year, the FD&SR Committee asks for a presentation on that report. She said the last report published was the 2009 version and that the 2010 report would be out in the fall. She said she had an issue with the statistics in the report, but said she will address that concern if there is still a need. She said SRNS is the contractor that publishes that report.

PRESENTATION

EPA's Role in the Site Remediation and Cleanup Program at SRS- David Williams, EPA

Mr. Williams began his presentation by providing a brief overview, and then defining EPA's mission, which is "to protect human health and the environment." He said the EPA was the brainchild of Richard Nixon. He stated in 1970, the EPA was formed. He said Congress writes environmental laws, and EPA writes regulations to implement laws, enforces regulations, and sets national standards.

CAB Chair Bridges asked what mechanism was in place before 1970 in dealing with environmental conditions. Mr. Williams said the Department of Interior and other departments controlled legislation at the time. He said the idea was to bring this all under one agency.

Mr. Williams continued that in 1980, the Superfund Law was established, and was funded through a tax on the chemical industry. He said that tax was to be used so the responsible party was not permitted to do the clean-up. He said the National Priority List was established, and in order to get on the National Priority List, they developed a "Hazard Ranking System." He said there was a calculated score taken through this ranking system, and if your site ranked high enough, you would be nominated to be on the National Priority list. He said once a site was put on the National Priority List, it was eligible to receive funding through the Superfund Law.

He stated in 1987, Executive Order 12580 delegated to all Federal cabinet-level agencies lead authority to implement certain provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). He said it gave the EPA implementing and oversight authority over clean-up actions. He said Executive Order 12580 made DOE and the Department of Defense, among others, the "lead agency." He said this means those agencies are responsible for funding their clean-up and administrative record-keeping.

He referred to a diagram of EPA Region 4, which includes SRS; he said Region 4 is the largest region. He said the EPA is divided into 10 regions. He said SRS is probably the most significant site in the country in terms of producing targets, measures, and goals. He said in 1993 there was the Federal Facilities Compliance Act, which gave the EPA, and the states, authority to enforce regulations against Federal agencies. He said in 1993, a conference was held in Keystone, Colorado, called the "Federal Facilities Environmental Restoration Dialogue Committee." He said EPA brought in the states, DOE, and the Department of Defense to this conference. He said this Committee decided to create Site Specific Advisory Boards (SSABs) such as the SRS CAB. He continued that during the next three years, this plan was finalize; he said the "Keystone Committee" established some of the basic principles on what should be operated on in terms to environmental clean-up. He reviewed these principles.

Mr. Williams stated that in Region 4, EPA regulates four DOE Sites, including SRS, Paducah Gaseous Diffusion Plant, Oak Ridge Reservation, and Pinellas Plant. He said SRS is his primary site. He said SRS was added to the National Priorities List in December 1989. He said SRS is required to have a Federal Facilities Agreement (FFA) with the State of South Carolina and EPA. He reviewed what the three party agreement between DOE, EPA, and SCHDEC entails.

Mr. Williams reviewed EPA's role, stating it has oversight of remedial actions at SRS, an ensured adherence to the NCP, CERCLA, and FFA guidance, technical and procedural assistance, and information,

guidance, and training. He said EPA and SCDHEC concurrence is required on the selection of remedies, the implementation of remedies, the operation of remedies, and the determination of success of remedies. He added that EPA's involvement is "early and often." He said the EPA ensures that the remedy is designed and constructed according to plan, achieving the objectives outlined in the ROD, and protective over human health and the environment. He said there is a regular effectiveness monitoring and 5-year remedy reviews.

He said, in regards to three party decisions, decision documents belong to DOE, SCDHEC, and the EPA, and the EPA must sign a ROD in order for it to be final. He then reviewed collaboration, stating a team work approach is employed to ensure all FFA requirements are met. He said the communication is excellent. He then went through a list of the EPA SRS team, and referred to a slide featuring all the sponsors for the Superfund Job Training Initiative (STJI). He provided a brief overview of the STJI program.

CAB member Parson asked if EPA had complete control, what it would have done differently in terms of clean-up at SRS if money was not an issue. Mr. Williams said he would have to defer that question to Robert Pope, EPA, and Shelly Wilson, SCDHEC.

PRESENTATION

State Regulatory Oversight-Shelly Wilson, SCDHEC

Ms. Wilson began her presentation by listing what SCDHEC does not cover, which includes the storage of spent nuclear fuel (SNF) and nuclear materials. She said this is exempted by Congress so the states do not have the authority to have oversight of those things, but Congress gave that authority to self-regulate to DOE; she said this is done nation-wide. She then reviewed SCDHEC's environmental roles, or what it does cover, which includes protection, oversight, emergency preparedness, and improvement.

She provided an overview of SCDHEC protection, stating in general EPA puts out many laws and regulations and the states, in large part, copy them on the State level. She said EPA will delegate authority to the state so it can implement those laws or programs. She said SCDHEC has delegated authority for air, waste, and clean-up. She said they only get delegated that authority if they show their programs are on par; she said the State cannot be any less stringent than the Federal, or EPA, standards. She said they are audited regularly by EPA to ensure the State is doing a good job in the implementation stage. She continued that SCDHEC looks at permit applications, and issues them in accordance with Federal and State requirements. She said they inspect facilities for compliance and take enforcement actions when necessary. She then listed protection programs.

Ms. Wilson reviewed oversight, saying SCDHEC monitors SRS and the surrounding areas to look at the environmental impact of SRS activities. Shed said they take independent samples that are analyzed for air, water, soil, sediment, vegetation, milk, fish and other game animals. She said every year they roll up that data and issue a report; she gave the online web address for this report as: http://www.scdhec.gov/environment/enserv/esop.htm

She said SCDHEC has a presence at SRS, and referred to a photo of a truck taking a shipment from SRS, with someone from SCDHEC following them, in a car, out of the state. She said they do that for every shipment.

She continued by reviewing emergency preparedness, stating South Carolina has a comprehensive emergency operations plan for disasters including natural and man-made disasters. She said SCDHEC takes extra measures for SRS including maintaining responders with Q clearances, holding practice drills specifically geared to SRS, and meeting quarterly.

She reviewed clean-up, reviewing some of the "tools" they have for clean-up. She said one the CAB does not hear a lot about is the Hazardous Waste Permit; she said this is their major tool for clean-up. She said they have the authority to have that permit under the Resource Conservation Recovery Act (RCRA). She

said the Hazardous Waste Permit allows SCDHEC to look comprehensively at SRS, and if there is any area that is contaminated, that permit says SCDHEC can require clean-up of that area. She said that permit directly covers the clean-up at F-Area, H-Area, M-Area, and the Mixed Waste Management Facility. She then reviewed the FFA, stating DOE, EPA, and SCDHEC all have decision-making authority for clean-up decisions. She said they have different authorizing laws that give them that authority, but said the FFA marries the process by which all the agencies use their individual authorities. She said this is more efficient and results in better, well-pieced decisions. Ms. Wilson continued to discuss clean-up, outlining key differences between the Hazardous Waste Permit and the FFA. She said the Permit is the "hammer," or authority, and the FFA is an agreement and outlines the process by which they come to decisions. She said if there was a violation of the Hazardous Waste Permit, SCDHEC would go directly to enforcement. She said if there is a disagreement with the FFA, they would go to dispute resolution. She said a permit is a defined regulatory mechanism and cannot be opted out of or canceled, but the FFA is an agreement, and any party involved can opt out of they want to.

She then reviewed Legacy Waste, saying that prior to the 70s and 80s, many industries employed practices that are now considered "barbaric." She said they are cleaning up a lot of that, and during that time SRS developed a lot of Legacy Waste that was difficult to treat and as a result, piled up. She said the Site Treatment Plan was enabled by the Federal Facility Compliance Act. She said in 1992, Congress told DOE it's time to figure out a way to treat and dispose of Legacy Waste; the Federal Facility Compliance Act said that DOE had to develop a plan for getting rid of that legacy Waste, enter an agreement with the State, and have a consent order that would enforce a plan for working off Legacy Waste. She said the Site Treatment Plan requires State approval for any hazard or radioactive waste shipment proposed to SRS. She gave a milestone example of the treatment of high level waste by 2028.

Ms. Wilson provided an overview of High Level Waste, referring to Section 3116 of the 2005 National Defense Authorization Act (NDAA). She said there is roughly 36 million gallons of High Level Waste in aging tanks at SRS. She said it is a huge focus of the state that the waste be treated and the tanks closed. She said the NDAA enables the State to have the tanks closed. She said this law was enacted to realistically bridge the gap so they could close tanks with very little residuals remaining in the tanks. She said every Closure Plan, or Module, for tanks includes how much is left in each tank, and "how clean is clean." She continued that the High Level Waste Tanks are regulated under the State Wastewater Program, and are being closed through the Wastewater Closure Plan. She said High Level Waste is also covered by the Hazardous Waste Permit and is addressed by the FFA process.

In terms of status, Ms. Wilson said SCDHEC's role is to maintain oversight in terms of permits, inspections, and emergency preparedness, among other items. She said SCDHEC will focus on High Level Waste treatment and tank closure, sit clean-up, Legacy Waste disposition, and transitioning from ARRA.

CAB member Jayaraman said radioactive waste and nuclear waste do not go under the hazardous waste category. He said CERCLA has no authority on nuclear or radioactive waste. He said CERCLA has authority when nuclear or radioactive waste is mixed with hazardous waste. He asked if those statements are correct. Ms. Wilson said CERCLA does address radioactive constituents. She said she is going to avoid the question of authority for some things. She said for the High Level Waste Tanks, some may argue that SCDHEC does not have authority to look at radionuclides in terms of closure for those High Level Waste Tanks. She said the SCDHEC position would be that because of Section 3116, SCDHEC definitely has authority over radionuclides. She said this could be debated, but that's the direction SCDHEC is taking right now. CAB member Jayaraman said he doesn't think SCDHEC should have that authority because the entire site isn't the State of South Carolina.

PRESENTATION

Federal Facility Agreement Appendix E- Brian Hennessey, DOE-SR

Mr. Hennessey began his presentation by stating its purpose, and then stated the FFA was established in August 1993. He defined the FFA, calling it a legally binding agreement between DOE, EPA, and

SCDHEC that governs the comprehensive clean-up at SRS. He stated what the FFA includes, and that is spells out the authorities, and responsibilities, of agencies and procedures for resolving disputes.

He reviewed the FFA Appendix E, stating it provides a lifecycle list of clean-up milestones of SRS Waste Sites listed in Appendix C. He said it is made up of Appendices E.1, E.2 and E.3. He continued that DOE updates the Appendix E annually and submits it for review to SCDHEC and EPA in November. He said each year they start with what was already approved and make adjustments to reflect site mission schedules, and regulator-approved implementation schedules for individual projects. He then referred to a graph of the FFA Appendix E Schedule.

He reviewed the FY 2011 Appendix E and the Recovery Act, stating although the Recovery Act did not have an effect on Appendix E, it had a profound effect on the amount of work that was accomplished. He said there was an agreement in 2009 when ARRA first "landed" at SRS that they would leave the milestones where they are, and would accelerate work to the greatest possible extent. He continued that there were some changes to this year's Appendix E in respect to the previous year's appendix; he listed and reviewed those changes. Mr. Hennessey then referred to a chart of the SRS Completion Plan, as well as several excerpts from Appendix E.

He summarized his presentation by stating the FY 2011 FFA Appendix E is available online at: http://www.srs.gov/general/programs/soil/ffa/ffa.html

He added that Recovery Act information is available online at: www.srs.gov/recovery

CAB member Parson asked if all milestones are administrative, or are they performance-based. Mr. Hennessey said there are both types of milestones. He reviewed these milestones.

PUBLIC COMMENTS

Patricia Carpenter McCracken, Augusta, brought up a copy of the 2011 Strategic Plan. She said she thinks the comment by Sam Booher may be a lack of confidence in the information on page 16 of the Plan. She read this passage. She said the public might be interested in more information on the Army training at SRS. She said she hopes the students who have the poster session could have a news release.

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John Walsh, EPA, said he is currently on detail in Region 4, working on the remediation side of the site. He said his job at EPA Headquarters is regulating WIPP. He continued that based on some of the comments he heard, he wanted to bring a few things to the CAB's attention on where EPA and DOE's discretion ends in terms of waste disposal. He said he thinks Bert Crapse, DOE-SR, did a great job explaining the Land Withdrawal Act, which established WIPP in 1990. He said it also established EPA as the regulator, and established a fairly narrow mission for WIPP, which was defense-related transuranic waste. He added that the limits of waste, both in terms of volume and the radiological constituents, are set by the law or statute, which is rare. He said Congress set those limits. He gave an example, stating DOE has had waste streams fit the WIPP waste acceptance criteria, but because they were closely related to reprocessing, it is not transuranic waste legally. He said legally High Level Waste cannot go to WIPP.

He said he attended the CAB Waste Management committee the previous month, and they were talking about for the Greater than Class C Waste EIS, WIPP is mentioned as an alternative. He said he overheard people asking if the CAB can make a recommendation to DOE to send the waste there. He said this is not DOE's call and even if EPA said it is fine, they still couldn't because it is set by Congress.

He said earlier this spring, the New Mexico legislature sent a letter to the BRC following their visit out to WIPP. He said it is a bipartisan invitation, or request, for New Mexico to participate in the treatment storage path forward with all nuclear wastes; he said this is unprecedented. He continued that House Resolution 2367 was introduced on June 24th by Congressman Pierce. He said it is called "The WIPP Extension Act of 2011." He said this would expand the mission from defense-related to government-owned TRU. He said this is a slight distinction, but explained how it would affect WIPP. He said this is the first

time since 1990 that they've talked about a path forward for waste streams which don't have a path forward.

With no further agenda business, CAB Chair Bridges adjourned the meeting.

~Meeting Adjourned